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ABSTRACT

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TELESCOPE SYSTEM HAVING AN INTELLIGENT MOTOR CONTROLLER

A telescope system has an intelligent motor controller for accurately controlling telescope position to facilitate location 10 of celestial objects and to precisely control the speed at which the telescope moves to facilitate tracking of celestial objects.

An optical encoder utilizes two photodetectors to provide enhanced servo control of the telescope positioning motors, a calibration circuit eliminates a need to test LED's during 15 assembly of the optical encoder and a brushless mount provides electrical communication to an altitude drive motor located in a fork thereof in a manner which mitigates problems due to undesirable wrapping of an electrical cable around the mount as the mount rotates in azimuth.

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